

IMAGE CAPTURE AND PROCESSING SYSTEM HEALTH CHECK

ABSTRACT

5 A system which provides a continuous indication of the
operating integrity, of an entire image capture and processing
system without the need for interfering with document throughput
or the need for special paper test documents to be inserted into
the scanning path. The system monitors performance from document
presentation and scanner output, through image processing. It
schedules maintenance of the system on an actual as needed basis.
10 It continuously collects and monitors the imaging characteristics
from work documents being processed and calculates a projected
date at which maintenance will be required in order to retain
system operating integrity. Minimum and maximum video values are
collected from the output of each picture element sensor for each
document. A running indication of system integrity is stored in a
white trend array and a black trend array. These arrays are
adjusted after an interval of time or one or more documents have
been processed. The change in value of a trend array element
depends upon whether the change indicated by the processing of
the previous document indicates a deterioration of performance or
a return to acceptable performance by the image capture system.
After a further interval, the arrays are shifted in parallel to
develop a maximum trend and a minimum trend for each picture
element.